



#5  
DECLARATION FOR PATENT APPLICATION

As the below-named inventors, we hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am an original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled USE OF PHOSPHOROTHIOLATE POLYNUCLEOTIDES IN LIGATING NUCLEIC ACIDS, the specification of which

\_\_\_\_\_ is attached hereto as Attorney Docket No. \_\_\_\_\_.

X was filed on June 15, 2001, as Application Serial No. 09/882,274 (Attorney Docket No. P-RD 4806)

and was amended on (or amended through) \_\_\_\_\_.  
(if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment(s) referred to above.

I acknowledge the duty to disclose to the U.S. Patent and Trademark Office all information known to myself to be material to patentability as defined in Title 37, Code of Federal Regulations, Sec. 1.56.

Under Sec. 1.56, information is material to patentability when it is not cumulative to information already of

Inventors: Burgin and Stewart  
Serial No.: 09/882,274  
Filed: June 15, 2001  
Page 2

record or being made of record in the application, and (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or (2) It refutes, or is inconsistent with, a position the applicant takes in: (a) Opposing an argument of unpatentability relied on by the U.S. Patent and Trademark Office, or (b) Asserting an argument of patentability.

I hereby claim the benefit under Title 35, United States Code, § 119(e) of the United States provisional application(s) listed below, which was converted to a provisional application by Petition under 37 C.F.R. Sec. 1.53(c)(2)(i), and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application(s) in the manner provided by the first paragraph of Title 35, United States Code § 112, I acknowledge the duty to disclose information that is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56 that became available between the filing date of the prior application(s) listed below and the filing date of this non-provisional application:

<u>Application Serial No.</u>	<u>Filing Date</u>	<u>Status</u>
60/290,313	May 10, 2001	Pending

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or

Inventors: Burgin and Stewart  
Serial No.: 09/882,274  
Filed: June 15, 2001  
Page 3

imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of first inventor: Alex B. Burgin, Jr.  
Inventor's signature: *Alex B. Burgin, Jr.*  
Date: 9-5-01  
Residence: Bainbridge Island, Washington  
Citizenship: USA  
Post Office Address: 449 Shannon Drive SE  
Bainbridge Island WA 98110

Full name of second inventor: Lance J. Stewart  
Inventor's signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Residence: Bainbridge Island, Washington  
Citizenship: \_\_\_\_\_  
Post Office Address: \_\_\_\_\_

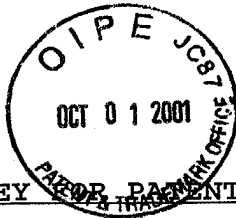
Inventors: Burgin and Stewart  
Serial No.: 09/882,274  
Filed: June 15, 2001  
Page 3



imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of first inventor: Alex B. Burgin, Jr.  
Inventor's signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Residence: Bainbridge Island, Washington  
Citizenship: \_\_\_\_\_  
Post Office Address: \_\_\_\_\_

Full name of second inventor: Lance J. Stewart  
Inventor's signature: *LJ Stewart*  
Date: 9/05/01  
Residence: Bainbridge Island, Washington  
Citizenship: USA .  
Post Office Address: 10075 NE. WINTHER, RD.  
BAINBRIDGE IL. WA 98110.



POWER OF ATTORNEY FOR PATENT APPLICATION BY ASSIGNEE

Assignee San Diego State University Foundation is the co-owner of the entire right, title and interest of U.S. patent application Ser. No. 09/882,274, filed on June 15, 2001, as attorney docket number P-RD 4806, and entitled USE OF PHOSPHOROTHIOLATE POLYNUCLEOTIDES IN LIGATING NUCLEIC ACIDS, and any subsequently filed divisional, continuation, continuation-in-part or reissue application, including international and foreign applications claiming priority thereto.

The Assignee hereby appoints the following attorneys to prosecute these applications and to transact all related business in the United States Patent and Trademark Office and any international and foreign patent offices:

CATHRYN CAMPBELL, Registration No. 31,815; DAVID A. GAY, Registration No. 39,200; CALVIN A. FAN, Registration No. 38,444; ANDREA L. GASHLER, Registration No. 41,029; JAMES J. WONG, Registration No. 34,949; DEBORAH L. CADENA, Registration No. 44,048; MELANIE K. WEBSTER, Registration No. 45,201; ASTRID R. SPAIN, Registration No. 47,956; MARGARET M. PARR, Registration No. 48,111; and KIMBERLY J. PRIOR, Registration No. 41,483.

Please direct all telephone calls to Cathryn Campbell at (858) 535-9001 and address all correspondence to:

CATHRYN CAMPBELL  
CAMPBELL & FLORES LLP  
4370 La Jolla Village Drive  
7<sup>th</sup> Floor  
San Diego, California 92122  
USPTO CUSTOMER NO. 23601



POWER OF ATTORNEY FOR PATENT  
APPLICATION BY ASSIGNEE SAN DIEGO  
STATE UNIVERSITY FOUNDATION  
Attorney Docket No.: P-RD 4806  
Serial No.: 09/882,274

I hereby certify that this correspondence is being deposited with  
the United States Postal Service as first class mail in an  
envelope addressed to: Box Missing Parts, Commissioner for  
Patents, Washington, D.C. 20231, on September 26, 2001.

By

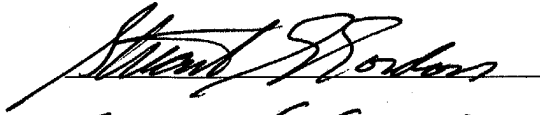
David A. Gay  
David A. Gay, Reg. No. 39,200

September 26, 2001  
Date of Signature

Inventors: Burgin and Stewart  
Serial No.: 09/882,274  
Filed: June 15, 2001  
Page 2

The undersigned is authorized to sign on behalf of the  
Assignee.

Signature:



Name (typed):

STUART G. GORDON

Title:

Director, Technology Transfer Office

Assignee:

SAN DIEGO STATE UNIVERSITY FOUNDATION

Date:

8/24/01



STATEMENT UNDER 37 C.F.R. § 3.73(b)

Title of Application: USE OF PHOSPHOROTHIOLATE POLYNUCLEOTIDES  
IN LIGATING NUCLEIC ACIDS

Application Ser. No.: 09/882,274

Filed: June 15, 2001

Inventor: Burgin and Stewart

Attorney Docket No.: P-RD 4806

EMERALD BIOSTRUCTURES, INCORPORATED, a corporation, states that it is the assignee of the entire right, title and interest in the patent application identified above by virtue of an assignment from the inventor of the application. A copy of the executed assignment, submitted for recording, is attached hereto as documentary evidence of the chain of title to the assignee.

The undersigned is empowered to sign this statement on behalf of the assignee.

Date: 9/5/01 Signature: [Signature]

Name: LANCIE STEWART.

Title: PRESIDENT





Statement Under CFR 3.73(b) by  
Emerald Biostructures, Incorporated  
Attorney Docket No.: P-RD 4806  
Serial No.: 09/882,274

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the United States Postal Service as first class mail in an  
envelope addressed to: Box Missing Parts, Commissioner for  
Patents, Washington, D.C. 20231, on September 26, 2001.

By


David A. Gay  
David A. Gay, Reg. No. 39,200

September 26, 2001  
Date of Signature



DECLARATION FOR PATENT APPLICATION  
Attorney Docket No.: P-RD 4806  
Serial No.: 09/882,274

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By   
David A. Gay, Reg. No. 39,200

September 26, 2001  
Date of Signature



POWER OF ATTORNEY FOR PATENT APPLICATION BY ASSIGNEE

1600 6360  
RECEIVED  
OCT 16 2001 #6  
TECH CENTER 1600/2900

Assignee Emerald Biostructures, Incorporated is the co-owner of the entire right, title and interest of U.S. patent application Ser. No. 09/882,274, filed on June 15, 2001, as attorney docket number P-RD 4806, and entitled USE OF PHOSPHOROTHIOLATE POLYNUCLEOTIDES IN LIGATING NUCLEIC ACIDS, and any subsequently filed divisional, continuation, continuation-in-part or reissue application, including international and foreign applications claiming priority thereto.

The Assignee hereby appoints the following attorneys to prosecute these applications and to transact all related business in the United States Patent and Trademark Office and any international and foreign patent offices:

CATHRYN CAMPBELL, Registration No. 31,815; DAVID A. GAY, Registration No. 39,200; CALVIN A. FAN, Registration No. 38,444; ANDREA L. GASHLER, Registration No. 41,029; JAMES J. WONG, Registration No. 34,949; DEBORAH L. CADENA, Registration No. 44,048; MELANIE K. WEBSTER, Registration No. 45,201; ASTRID R. SPAIN, Registration No. 47,956; MARGARET M. PARR, Registration No. 48,111; and KIMBERLY J. PRIOR, Registration No. 41,483.

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CATHRYN CAMPBELL  
CAMPBELL & FLORES LLP  
4370 La Jolla Village Drive  
7<sup>th</sup> Floor  
San Diego, California 92122  
USPTO CUSTOMER NO. 23601

Inventors: Burgin and Stewart  
Serial No.: 09/882,274  
Filed: June 15, 2001  
Page 2

The undersigned is authorized to sign on behalf of the  
Assignee.

Signature:

  
\_\_\_\_\_

Name (typed):

LANCE STEWART

Title:

PRESIDENT

Assignee:

EMERALD BIOSTRUCTURES, INCORPORATED

Date:

9/5/01

STATEMENT UNDER 37 C.F.R. § 3.73(b)



Title of Application: USE OF PHOSPHOROTHIOLATE POLYNUCLEOTIDES  
IN LIGATING NUCLEIC ACIDS

Application Ser. No.: 09/882,274

Filed: June 15, 2001

Inventor: Burgin and Stewart

Attorney Docket No.: P-RD 4806

SAN DIEGO STATE UNIVERSITY FOUNDATION, a UNIVERSITY, states that it is the assignee of the entire right, title and interest in the patent application identified above by virtue of an assignment from the inventor of the application. A copy of the executed assignment, submitted for recording, is attached hereto as documentary evidence of the chain of title to the assignee.

The undersigned is empowered to sign this statement on behalf of the assignee.

Date: 8/24/01

Signature: 

Name: STUART G. GORDON

Title: Director, Technology Transfer Office



Recordation Form Cover Sheet and  
executed Assignment by Lance J.  
Stewart

Attorney Docket No.: P-RD 4806  
Serial No.: 09/882,274

I hereby certify that this correspondence is being deposited with  
the United States Postal Service as first class mail in an  
envelope addressed to: Box Missing Parts, Commissioner for  
Patents, Washington, D.C. 20231, on September 26, 2001.

By

David A. Gay  
David A. Gay, Reg. No. 39,200

September 26, 2001  
Date of Signature



Statement Under CFR 3.73(b) by San  
Diego State University Foundation  
Attorney Docket No.: P-RD 4806  
Serial No.: 09/882,274

I hereby certify that this correspondence is being deposited with  
the United States Postal Service as first class mail in an  
envelope addressed to: Box Missing Parts, Commissioner for  
Patents, Washington, D.C. 20231, on September 26, 2001.

By

David A. Gay

David A. Gay, Reg. No. 39,200

September 26, 2001

Date of Signature

FORM PTO-1595 (Modified)  
(Rev. 6-93)  
OMB No. 0651-0011 (exp. 4/94)  
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P08/REV02

## RECORDATION FORM COVER SHEET

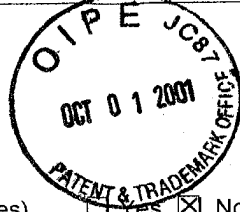
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Patent and Trademark Office

**PATENTS ONLY COPY**

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To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):  
**Lance J. Stewart**



2. Name and address of receiving party(ies):

Name: **Emerald BioStructures, Incorporated**

Internal Address: \_\_\_\_\_

Additional names(s) of conveying party(ies) ☐ Yes ☒ No

3. Nature of conveyance:

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other \_\_\_\_\_

Street Address: **7865 NE Day Rd. W.**

City: **Bainbridge Island** State: **WA** ZIP: **98110**

Execution Date: **September 5, 2001**

Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application number(s) or registration numbers(s):

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

A. Patent Application No.(s)

**09/882,274**

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: **Cathryn Campbell**

Internal Address: **CAMPBELL & FLORES LLP**

Street Address: **4370 La Jolla Village Drive, 7th Floor**

City: **San Diego** State: **CA** ZIP: **92122**

6. Total number of applications and patents involved: **1**

7. Total fee (37 CFR 3.41):.....\$ **40.00**

☒ Enclosed - Any excess or insufficiency should be credited or debited to deposit account

☐ Authorized to be charged to deposit account

8. Deposit account number:

**03-0370**

DO NOT USE THIS SPACE

9. Statement and signature.

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*

**David A. Gay, Reg. No. 39,200**

Name of Person Signing

*David A. Gay*

Signature

**4-26-01**

Date

Total number of pages including cover sheet, attachments, and document: **4**



ASSIGNMENT

COPY

This Assignment is made by Lance J. Stewart of Bainbridge Island, Washington, Assignor, to EMERALD BIOSTRUCTURES, INCORPORATED, Assignee, having a place of business at 7865 NE Day Rd. W., Bainbridge Island, Washington 98110.

WHEREAS, Assignor is a joint inventor of a new and useful USE OF PHOSPHOROTHIOLATE POLYNUCLEOTIDES IN LIGATING NUCLEIC ACIDS for which an application for United States Letters Patent was filed on June 15, 2001, in the United States Patent and Trademark Office, bearing Serial No. 09/882,274 and identified as Attorney Docket No. P-RD 4806.

WHEREAS, Assignor believes that Assignor is one of the original joint inventors of the invention disclosed and claimed in said application for Letters Patent; and

WHEREAS, the parties desire to have a recordable instrument assigning the entire right, title and interest in and to said invention, said application and any Letters Patent that may be granted for said invention in the United States and throughout the world;

NOW, THEREFORE, in accordance with the obligations to assign the invention and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor sells, assigns, and transfers to Assignee, the entire right, title, and interest in and to said invention, said application and any Letters Patent that may be granted for said invention in the United States and throughout the world, including the right to file foreign applications directly in the

Inventors: Burgin and Stewart  
Serial No.: 09/882,274  
Filed: June 15, 2001  
Page 2

name of the Assignee and to claim for any such foreign applications any priority rights to which such applications are entitled under international conventions, treaties, or otherwise.

Assignor agrees that, upon request and without further compensation, but at no expense to Assignor, Assignor and Assignor's legal representatives and assigns will do all lawful acts, including the execution of papers and the giving of testimony, that may be necessary or desirable for obtaining, sustaining, reissuing, or enforcing Letters Patent in the United States and throughout the world for said invention, and for perfecting, recording, or maintaining the title of Assignee, its successors and assigns, to said invention, said application, and any Letters Patent granted for said invention in the United States and throughout the world.

Assignor represents and warrants that Assignor has not granted and will not grant to others any rights inconsistent with the rights granted herein.

Assignor authorizes and requests the Commissioner of Patents and Trademarks of the United States and of all foreign countries to issue any Letters Patent granted for said invention, whether on said application or on any subsequently filed divisional, continuation, continuation-in-part or reissue application, to Assignee, its successors and assigns, as the assignee of the entire interest in said invention.

Inventors: Burgin and Stewart  
Serial No.: 09/882,274  
Filed: June 15, 2001  
Page 3

IN WITNESS WHEREOF, Assignor has executed this  
Assignment on the date(s) provided below.

Assignor: Lance J. Stewart

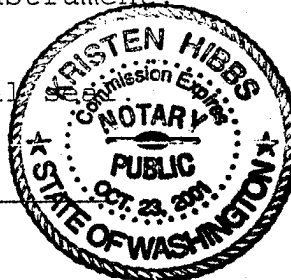
LJ Stewart      9/5/01  
Signature      Date

STATE OF Washington )  
COUNTY OF Kitsap )

On September 5 2001, before me, Kristen Hibbs  
personally appeared Lance J. Stewart,  
X personally known to me - OR -      proved to me on the basis  
of satisfactory evidence to be the person(s) whose name(s) is/are  
subscribed to the within instrument and acknowledged to me that  
he/she/they executed the same in his/her/their authorized  
capacity(ies), and that by his/her/their signature(s) on the  
instrument the person(s), or the entity upon behalf of which the  
person(s) acted, executed the instrument.

WITNESS by hand and official

Kristen Hibbs  
(Signature of Notary)



FORM PTO-1595 (Modified)  
(Rev. 6-93)  
OMB No. 0651-0011 (exp. 4/94)  
Copyright 1994-97 LegalStar  
P08/REV02

RECORDATION FORM COVER SHEET

**PATENTS ONLY**

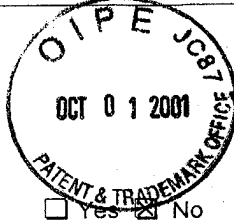
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U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

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To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):  
**Alex B. Burgin, Jr.**



2. Name and address of receiving party(ies):

Name: **San Diego State University Foundation**

Internal Address: \_\_\_\_\_

Street Address: **5300 Campanile Drive**

City: **San Diego** State: **CA** ZIP: **92182**

Additional name(s) & address(es) attached? ☐ Yes ☒ No

Additional names(s) of conveying party(ies) ☐ Yes ☒ No

3. Nature of conveyance:

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other \_\_\_\_\_

Execution Date: **September 5, 2001**

4. Application number(s) or registration numbers(s):

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

A. Patent Application No.(s)

**09/882,274**

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: **Cathryn Campbell**

Internal Address: **CAMPBELL & FLORES LLP**

Street Address: **4370 La Jolla Village Drive, 7th Floor**

City: **San Diego** State: **CA** ZIP: **92122**

6. Total number of applications and patents involved: **1**

7. Total fee (37 CFR 3.41):.....\$ **40.00**

☒ Enclosed - Any excess or insufficiency should be credited or debited to deposit account

☐ Authorized to be charged to deposit account

8. Deposit account number:

**03-0370**

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

**David A. Gay, Reg. No. 39,200**

Name of Person Signing

*David A. Gay*

Signature

**9-26-01**

Date

Total number of pages including cover sheet, attachments, and document:

**4**

COPY

ASSIGNMENT

This Assignment is made by Alex B. Burgin, Jr. of Bainbridge Island, Washington, Assignor, to SAN DIEGO STATE UNIVERSITY FOUNDATION, Assignee, having a place of business at 5300 Campanile Drive, San Diego, California 92182-1998.

WHEREAS, Assignor is a joint inventor of a new and useful USE OF PHOSPHOROTHIOLATE POLYNUCLEOTIDES IN LIGATING NUCLEIC ACIDS for which an application for United States Letters Patent was filed on June 15, 2001, in the United States Patent and Trademark Office, bearing Serial No. 09/882,274 and identified as Attorney Docket No. P-RD 4806.

WHEREAS, Assignor believes that Assignor is one of the original joint inventors of the invention disclosed and claimed in said application for Letters Patent; and

WHEREAS, the parties desire to have a recordable instrument assigning the entire right, title and interest in and to said invention, said application and any Letters Patent that may be granted for said invention in the United States and throughout the world;

NOW, THEREFORE, in accordance with the obligations to assign the invention and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor sells, assigns, and transfers to Assignee, the entire right, title, and interest in and to said invention, said application and any Letters Patent that may be granted for said invention in the United States and throughout the world, including the right to file foreign applications directly in the

Inventors: Burgin and Stewart  
Serial No.: 09/882,274  
Filed: June 15, 2001  
Page 2

name of the Assignee and to claim for any such foreign applications any priority rights to which such applications are entitled under international conventions, treaties, or otherwise.

Assignor agrees that, upon request and without further compensation, but at no expense to Assignor, Assignor and Assignor's legal representatives and assigns will do all lawful acts, including the execution of papers and the giving of testimony, that may be necessary or desirable for obtaining, sustaining, reissuing, or enforcing Letters Patent in the United States and throughout the world for said invention, and for perfecting, recording, or maintaining the title of Assignee, its successors and assigns, to said invention, said application, and any Letters Patent granted for said invention in the United States and throughout the world.

Assignor represents and warrants that Assignor has not granted and will not grant to others any rights inconsistent with the rights granted herein.

Assignor authorizes and requests the Commissioner of Patents and Trademarks of the United States and of all foreign countries to issue any Letters Patent granted for said invention, whether on said application or on any subsequently filed divisional, continuation, continuation-in-part or reissue application, to Assignee, its successors and assigns, as the assignee of the entire interest in said invention.

Inventors: Burgin and Stewart  
Serial No.: 09/882,274  
Filed: June 15, 2001  
Page 3

IN WITNESS WHEREOF, Assignor has executed this  
Assignment on the date(s) provided below.

Assignor: Alex B. Burgin, Jr.

Alex B. Burgin, Jr. 9-5-01  
Signature Date

STATE OF Washington )  
COUNTY OF Kitson )

On 9-5-01, before me, Lisa D. Johnson  
personally appeared Alex B. Burgin, Jr.,  
\_\_\_\_\_ personally known to me - OR - ☒ proved to me on the basis  
of satisfactory evidence to be the person(s) whose name(s) is/are  
subscribed to the within instrument and acknowledged to me that  
he/~~she/they~~ executed the same in his/~~her/their~~ authorized  
capacity(~~ies~~), and that by his/~~her/their~~ signature(s) on the  
instrument the person(s), or the entity upon behalf of which the  
person(s) acted, executed the instrument.

WITNESS by hand and official seal.

Lisa D. Johnson  
(Signature of Notary)

